



Energy Performance Incentives for Major Renovations of Existing Homes

Instructions:

- 1) To apply, contact ReBuild Western MA at rebuildwma@icfi.com or 877-524-1325 by 12/31/2012.
- 2) Choose a HERS Rating company. A list of qualified companies to work with throughout construction and conduct all required project site visits, testing and reporting can be provided upon request.
- 3) Complete and submit a completed application, including the signed acceptance on page 3, with all required documentation via one of the options listed:

Fax: 800-784-8262
 E-mail: rebuildwma@icfi.com.
 Mail: ReBuild WMA c/o ICF
 33 Hayden Ave, 3rd Floor
 Lexington, MA 02421

- 4) You will receive a participation confirmation letter outlining the incentives you may be eligible to receive. Final incentives are subject to home verification.
- 5) Following final inspection, designated recipient will receive incentive check(s) for all qualified home units.
- 6) Submit **Section 2** of the application packet to your local code official for compliance to the energy code.

Section 1-For Program participation

PROJECT AND INCENTIVE RECIPIENT INFORMATION					
Applicant (Property owne	r):		Recipient (incentive check issued to, if not homeowner):		
FEMA Registration #:			Relationship to Property Owner:		
Site Address: Street or PO	Box, City, & Zip Code	e:	Recipient Address: Street or PO Box, City, & Zip Code:		
Phone:	E-mail:		Phone:	E-mail:	
If recipient is different th	an applicant, applica	nt must sign to author	rize:		
		PROJECT	Γ INFORMATION		
Please check your primary home heating Fuel Type: Natural Gas					
Gas Service Provider (if ap	pplicable):		Natural Gas Account # (if ap	plicable):	
Electric Service Provider:			Electric Account #:		
Are you currently participating in the Utility funded Western MA Stollars, would you like to learn more about these Programs:			orm Recovery Programs:	Yes No Yes No	
Does this property include any Low Income Units:	Number of Low Income Units:	Number of Non Low Income Units:	Low Income Documentatio	n:	
Building Permit Number:			Town Energy Code: Bas	se Stretch Unsure	
General Contractor/Builder or Architect:			General Contractor/Builder	or Architect - email address:	
General Contractor/Bu	ilder or Architect –	Mailing address			





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The performance incentives available under the ReBuild Western Massachusetts program require that:

- 1) Participants can participate in only one of the following programs: the Complete Rebuild, Major Renovations or Repairs Program.
- 2) Participants must meet individual bank loan requirements in order to qualify for 0% interest loans.
- 3) Homes are tested, and certified with a HERS index by a Home Energy Rating System (HERS) rater,
- 4) Includes a completed Energy Star Thermal Bypass Checklist, and
- 5) Comply with the mandatory provisions of the International Energy Conservation Code (IECC) 2009.

	HERS INDEX AND INCENTIVES FOR MAJOR RENOVATIONS								
Which	Which type of incentive are you applying for? (Check all that apply):								
0% Inte	0% Interest Loan Grant Grant								
	Performance Loans and Grants								
Tier	Home Size (ft ²)	# of Units	Maximum HERS Score ¹	Target HERS index ¹	Permit approve d	Maximum Performance Loan (0% interest)	ReBuild Performance Grant Rebate	Total Targeted Loan Amount ^{2 3}	Total Targeted Grant Incentive Level ^{2 3}
Tier I	<2,000		85			\$ 20,000	\$ 4,000		
Hell	2,000+		80			\$ 20,000	\$ 4,000		
Tier II	Any		65			\$ 50,000	\$ 8,000		
Tier III	Any		50			\$ 75,000	\$12,000		
Tier IV	Any		40			\$100,000	\$20,000		

¹ HERS index must be achieved through energy-efficient design before any on-site renewable generation.

²Total targeted Loan and Grant Incentive Level is equal to the number of eligible units multiplied by the loan or grant amounts that correspond with the target HERS Index.

³Additional incentives for Low Income units will be added to award letter once verified by the Program





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ReBuild Western Massachusetts Terms and Conditions

1. Definitions

- a. "DOER" refers to the Massachusetts Department of Energy Resources
- b. "Program" refers to the ReBuild Western MA Energy Efficiency Program
- c. "EEOs" are the energy efficiency opportunities described in the ReBuild Western Massachusetts forms

2. Eligibility

- a. Residents, businesses, and municipals repairing or rebuilding their facility as a result of damage incurred from the June 1, 2011 tornado are eligible to participate. Residents, businesses, and municipals are required to provide documentation verifying the repair or construction is a result of tornado damage.
- b. Participants can participate in only one of the following programs: the Complete Rebuild, Major Renovations or Repairs Program.
- c. Participants must meet individual bank loan requirements in order to qualify for 0% interest loans.
- d. Repairs, construction, and installations must be completed by December 31, 2012.
- e. When required by law, repairs, construction, installations, and engineering services must be completed by a licensed contractor.
- f. Residents, businesses, and municipals must send and complete all forms and any other required documentation to the DOER no later than thirty (30) days after install.
- g. All incentive forms in connection with the Program must be received by the DOER by December 31, 2012

3. Installation

a. Prior to honoring any incentive, the DOER reserves the right to conduct and on-site verification that the EEOs were installed according to Program guidelines and is in operation. This site visit and all aspects related to this site visit, and conducted solely for such purpose. The site visit is not a safety review, nor is it intended for any other purpose.

4. Warranties

a. The DOER and the Program Administrator do not endorse, guarantee, or warrant any particular engineer, contactor, manufacturer, or installation.

5. Changes to the Program

a. Program is subject to change without prior notice, and incentive offers may increase or decrease at any time.

6. Tax Liability

a. Participants of the Program may be subject to tax liability for the values of the goods and services received through the program pursuant state or federal income tax codes.

7. No Tax Liability or the DOER or the Program Administrator

a. The DOER and the program administrator are not responsible for any tax liability which may be imposed as a result of the receipt of the rebates provided by the DOER to the customer.

8. Liability & Release

a. As part of the consideration for participating in the Program, participant hereby releases and shall indemnify, hold harmless, and defend the DOER and it's Program Administrator from any and all claims, losses, harm, costs, liabilities, damages, and expenses (including attorneys' fees) of any nature whatsoever arising directly or indirectly out of or in connection with the installation the EEOs at the premises or any material and labor required for such installation.

Applicant Signature:	Date:

Submit the completed and signed Section 1 of this application along with required documentation via one of the following:

Fax: 800-784-8262
 E-mail: rebuildwma@icfi.com
 Mail: ReBuild WMA c/o ICF
 33 Hayden Ave, 3rd Floor
 Lexington, MA 02421





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Section 2- For Code Compliance Only

RATER INFORMATION					
HERS Rating Company:	Rater:		Date:	HERS Rating Company:	
The Thermal Bypass Checklist has been sat			Final HERS Rating Date:	Builder Approved	

	TARGETED AND ACHIEVED HERS INDICES					
	Performance Testing for Code Compliance					
Home Size (ft ²)	# of Units	HERS Score for Code Compliance	Target HERS index	Final Achieved HERS Index	Permit approved	
< 2,000		85				
2,000+		80				

IECC 2009 MANDATORY PROVISIONS					
	Applicable	N/A	Compiled		
Residential Energy Compliance Certificate*					
Thermostat Controls					
Heat Pump Supplementary Heat					
Sealing of Ducts					
Circulating Hot Water Systems					
Mechanical Ventilation					
HVAC Equipment Sizing					
Snow Melt System Controls					
Pool Heaters, Pool Auto-Time Switches, & Pool Covers					
Building Thermal Envelope is Durably Sealed					

^{*}Form can be downloaded from http://www.energycodes.gov/rescheck/download.stm or email rebuildwma@icfi.com.





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Major Renovations for Existing Homes Program:

The Major Renovations includes residential structures of four stories or less. Projects with five or more stories participate in the Commercial/Business ReBuild Western Massachusetts Program. Projects shall meet the following three sets of requirements in order to qualify for ReBuild Western Massachusetts incentives:

1) HERS Index Rating

The HERS Index rating system provides a home energy score on a scale where "0" means that there is a zero net energy building and "100" is a typical new home built in 2006. The core is based on "typical" home household energy use and not on your energy bills. Therefore, the lower the HERS index the better the structure's energy efficiency and the higher the incentives offered by the program.

The performance requirements are as follows:

Tier I incentives	Residential Gut Renovations less than 2,000 ft ²	HERS index of 85 or less
(stretch code)	Residential Gut Renovations 2,000 ft ² or greater	HERS index of 80 or less
Tier II incentives	Residential Gut Renovations of any size	HERS index of 65 or less
Tier III incentives	Residential Gut Renovations of any size	HERS index of 50 or less
Tier IV incentives	Residential Gut Renovations of any size	HERS index of 40 or less

2) Energy Star Thermal Bypass Checklist

A HERS rater will also use the <u>Energy Star's Thermal Bypass Inspection Checklist</u> or the newer <u>Energy Star's Thermal Enclosure Checklist</u> to ensure that the existing home renovations, repairs, alterations, or additions, comply with the energy efficiency standards of the stretch energy code. Once the Checklist is completed, the rater will inform the individual responsible for the project whether the work is in compliance. The Checklist is broken-down into six different sections:

- (1) Overall air barrier and thermal barrier alignment;
- (2) Walls adjoining exterior walls or unconditioned spaces;
- (3) Floors between conditioned and exterior spaces;
- (4) Shafts;
- (5) Attic and ceiling interface;
- (6) Common walls between dwelling units.

3) IECC 2009 Mandatory Requirements

In addition to the HERS rating and the Thermal Bypass Checklist, all new homes in Massachusetts must also comply with the mandatory requirements of the base energy code. These are summarized below:

<u>401.3 Certificate</u>: The builder or certified design professional must have a completed certificate listing the insulation values for various parts of the building walls, foundation, ceiling, basement, slab, crawlspace, and ducts. This certificate must be posted on or in the electrical distribution panel. You can download the Residential Energy Compliance Certificate at http://www.energycodes.gov/rescheck/.

402.4.1 **Building Thermal Envelope**: It is required that the building's thermal envelope is durably sealed via caulking, gasketing, weather-stripping, or otherwise sealed with an air barrier material, suitable film, or solid material. The Stretch Energy Code uses the Energy Star's Thermal Bypass Checklist (TBC) to document. You can request a copy of the TBC from the Program or you can download it at http://www.energystar.gov/ia/partners/bldrs lenders raters/downloads/Thermal Bypass Inspection Checklist.pdf.

403.1 Thermostat Control: The structure must have at least one thermostat for each separate heating and cooling system.

403.1.2 Heat Pump Supplementary Heat: Heat pumps that have supplementary electric-resistance heat must have controls that, except during times of defrosting, prevent supplemental heat operation when the heat pump compressor can meet the heating load.





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- 403.2.2 **Sealing**: All ducts, air handlers, filter boxes, and building cavities if used as return ducts must be sealed. 403.2.3 **Building Framing Cavities**: Building framing cavities cannot be used as supply ducts.
- 403.3 **Mechanical System Piping Insulation**: Mechanical system piping that is capable of transporting fluids above 105°F (41°C) or below 55°F (13°C) must be insulated to a minimum insulation of R-3.
- 403.4 Circulating Hot Water Systems: All circulating service hot water piping must be insulated to a minimum of R-2 and must include an automatic or "readily accessible" manual switch that will turn off the hot water pump when the system is not in use.
- <u>403.5 **Mechanical Ventilation**</u>: Outdoor air intakes and exhausts must have automatic or gravity dampers that close when the ventilation system is not in operation.
- 403.6 Equipment Sizing: Heating, ventilation and air conditioning equipment, (HVAC) must be sized based on appropriate calculations of the buildings' heating and cooling loads. The Air Conditioning Contractors of America (ACCA) publishes a manual (Manual J) that is recognized by the energy code as the proper source to figure out the buildings heating and cooling needs. Software also exists to assist with appropriate sizing using Manual J. In addition, other heating/cooling calculation methodologies may be used if they are from code approved sources. For more information on HVAC trainings available in Massachusetts visit the Center for Ecological Technologies (CET) at http://cetonline.org/Events/events.php?id=177.
- 403.7 Systems Serving Multiple Dwelling Units: Systems that serve multiple units must comply with IECC sections 503 and 504 instead of section 403.
- 403.8 **Snow Melt System Controls**: For the winter months, home snow and ice melting systems under driveways and sidewalks, must include automatic controls that will shut off the system when the pavement temperature is above 50°F (with no precipitation) and an automated shutoff when the outdoor temperature is above 40°F.
- <u>403.9 **Pools**</u>: There are specific provisions pertaining to pools and pool heaters. If your residential structure does not contain a pool, then these will not apply to your property.
 - <u>403.9.1 Pool Heaters</u>: Pool heaters must be equipped with a "readily accessible" on-off switch that will turn off the heater without adjusting the thermostat setting. Pool heaters that are powered by natural gas <u>cannot</u> have continuously burning pilot lights.
 - 403.9.2 **Time switches**: There must be a preset-scheduled automated on/off switch for the pool heater and pumps. However, if there are circumstances where public health standards require 24-hour pump operation or where pool heating pumps are required to operate as they are solar-heat-recovery and waste-heat-recovery systems, then the automated on/off switch for pool heaters and pumps will not be applicable to you.
 - 403.9.3 **Pool Covers**: Heated pools must be equipped with a vapor-retardant pool cover on or at the water surface. Pools that are heated to more than 90°F (32°C) must have a pool cover with a minimum insulation value of R-12.